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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,298	08/23/2006	Dominique Plee	FR-AM 2021 NP	7186
31684 7590 09/11/2008 ARKEMA INC. PATENT DEPARTMENT - 26TH FLOOR 2000 MARKET STREET PHILADELPHIA, PA 19103-3222				
EXAMINER				
HA, NGUYEN T				
ART UNIT		PAPER NUMBER		
2831				
MAIL DATE		DELIVERY MODE		
09/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/590,298

**Applicant(s)**

PLEE ET AL.

**Examiner**

NGUYEN T. HA

**Art Unit**

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 0607
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shinozaki et al. (US 6,547,990).

Regarding claim 1, Shinozaki et al. disclose a method for preparing electrodes based on activated carbon and carbon nanotubes on a collector, comprising the following steps:

- (a) blending of an initial powdery carbon material comprising activated carbon and carbon nanotubes in a solvent (column 12, lines 34-41);
- (b) adding of a polymer binder and blending until homogenized to form a paste (column 12, lines 34-42);
- (c) drying of the paste (column 12, line 42);
- (d) optionally, mixing of the paste (column 12, lines 42-43); and
- (e) covering of the collector with the paste (column 12, lines 42-44).

Regarding claim 2, Shinozaki et al. disclose in which step a) is carried out by ultrasonication (column 11, lines 64-66).

Regarding claim 3, Shinozaki et al. disclose in which step a) is carried out at a temperature of at least 50<sup>0</sup> C (column 12, lines 9-10).

Regarding claim 4, Shinozaki et al. disclose the initial powdery carbon material of step a) is obtained by a method comprising the following steps: (f) dispersion of the carbon nanotubes in a solvent; (g) addition of the activated carbon and blending; and (h) drying of the initial powdery carbon material (column 12, lines 34-41).

Regarding claim 5, Shinozaki et al. disclose the addition of activated carbon is followed by ultrasonication (column 11, lines 64-66).

Regarding claim 6, Shinozaki et al. disclose the initial powdery carbon material is a blend of activated carbon and carbon nanotubes, in a weight proportion ranging from 95/5 to 50/50 (column 5, lines 48-52).

Regarding claim 7, Shinozaki et al. disclose the binder is an aqueous suspension of polytetrafluoroethylene or styrene/butadiene (column 12, line 50).

Regarding claim 8, Shinozaki et al. disclose in which step d) is carried out to fibrillation of the binder.

Regarding claim 9, Shinozaki et al. disclose method for preparing a paste based on activated carbon and carbon nanotubes, comprising steps a) to d).

Regarding claim 10, Shinozaki et al. disclose improved-aging electrode obtained by the method (abstract)

Regarding claim 11, Shinozaki et al. disclose a supercapacitor comprising at least one electrode (abstract)

Regarding claim 12, Shinozaki et al. disclose in which said solvent is water.

#### **Citation Relevant of Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Yoshida et al. (US 7,088,572) disclose polymer gel electrolyte, secondary cell, and electrical double layer capacitor.
- b. Tano et al. (US 6,882,517) disclose raw material composite for carbon material used in electric double layer capacitor.
- c. Maeda et al. (US 6,118,650) disclose mesophase pitch-based activated carbon fibers and electrical double layer capacitor.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN T. HA whose telephone number is (571)272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nguyen T Ha/  
Primary Examiner, Art Unit 2831